Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-12. (Canceled)

13. (Currently Amended) A method for producing a semiconductor component in which at least one doped region is introduced into a semiconductor wafer, comprising the steps of:

applying a solid glass layer ~~provided with a dopant on at least one of two sides of the semiconductor wafer~~ both on the front side of the semiconductor wafer and on the back side of the semiconductor wafer, a doping type of the dopant on the back side being opposite compared to the doping type of the dopant on the front side;

heating the semiconductor wafer to a high temperature of at least 1200 degrees centigrade while the glass layer is applied so that the dopant from the solid glass layer penetrates into the semiconductor wafer to produce the at least one doped region;

applying a neutral glass layer on the solid glass layers prior to heating the semiconductor wafer;

removing the neutral glass layers together with the solid glass layers after heating the semiconductor wafer; and

~~removing the solid glass layer~~;

providing the dopant at a dosage of at least $10^{17}/cm^2$ in the at least one doped region;

wherein the step of applying the solid glass layer is performed in accordance with a chemical vapor deposition at atmospheric pressure.

14. (Canceled)

15. (Canceled)

16. (Previously Presented) The method according to claim 13, wherein:

the step of heating the semiconductor wafer is performed in an oxidizing atmosphere.

17. (Previously Presented) The method according to claim 13, further comprising the step of:

maintaining the high temperature for about 20 to 30 hours.

18. (Previously Presented) The method according to claim 13, further comprising the step of:

maintaining the high temperature for 21 hours.

19. (Canceled)

20. (Canceled)

21. (Previously Presented) The method according to claim 13, wherein:

the solid glass layer has a dopant constituent of greater than 2 percentage by weight.

22. (Previously Presented) The method according to claim 13, wherein:

the solid glass layer has a dopant constituent of about 3 to 6 percentage by weight.

23. (Canceled)

24. (Canceled)

25. (Previously Presented) The method according to claim 13, wherein:

the solid glass layer has a thickness of about 2 micrometers.

26. (Canceled)

27. (Currently Amended) The method according to claim ~~26~~ 13, wherein:

the neutral glass layer has a thickness of about 0.5 micrometers.

28. (Previously Presented) The method according to claim 13, wherein:

the step of removing the solid glass layer is performed in accordance with hydrofluoric acid.

29. (Canceled)

30. (Currently Amended) The method according to claim [[29]] 13, wherein the high temperature is between 1200 and 1280 degrees centigrade.

31. (Currently Amended) A method for producing a semiconductor component in which at least one doped region is introduced into a semiconductor wafer, comprising:

applying a solid glass layer provided with a dopant on ~~at least one of two~~ both sides of the semiconductor wafer;

heating the semiconductor wafer to a high temperature of at least 1200 degrees centigrade while the glass layer is applied so that the dopant from the solid glass layer penetrates into the semiconductor wafer to produce the at least one doped region;

applying a neutral glass layers on the solid glass layer prior to heating the semiconductor wafer;

removing the neutral glass layers together with the solid glass layers after heating the semiconductor wafer; and

~~removing the solid glass layer~~;

providing the dopant at a dosage of at least $10^{17}/cm^2$ in the at least one doped region;

wherein the solid glass layer is applied using chemical vapor deposition at atmospheric pressure; and

wherein ~~the solid glass layer has a thickness of about 2 micrometers and a dopant constituent of greater than 2 percentage by weight,~~ the dopant constituent of the solid glass layer on a front side of the semiconductor wafer ~~being~~ is different from the dopant constituent of the solid glass layer on a back side of the semiconductor wafer.

32. (Previously Presented) The method of claim 31, wherein silane gas and B_2H_6 gas is used in the chemical vapor deposition to generate silicon dioxide and p-type dopants.

33. (Previously Presented) The method of claim 31, wherein silane PH_3 gas is used in the chemical vapor deposition to generate silicon dioxide and n-type dopants.

34. (Previously Presented) The method of claim 31, wherein tetra-ethyl-ortho-silicate gas and trimethyl borate is used in the chemical vapor deposition to generate silicon dioxide and p-type dopants.

35. (Previously Presented) The method of claim 31, wherein tetra-ethyl-ortho-silicate gas and trimethyl phosphate is used in the chemical vapor deposition to generate silicon dioxide and n-type dopants.

36. (Currently Amended) A method for producing a semiconductor component in which at least one doped region is introduced into a semiconductor wafer, comprising:

applying a solid glass layer provided with a dopant on ~~at least one of two~~ both sides of the semiconductor wafer;

heating the semiconductor wafer to a high temperature of at least 1200 degrees centigrade while the glass layer is applied so that the dopant from the solid glass layer penetrates into the semiconductor wafer to produce the at least one doped region;

applying a neutral glass layer on the solid glass layers prior to heating the semiconductor wafer;

removing the neutral glass layers together with the solid glass layers after heating the semiconductor wafer; and

~~removing the solid glass layer; and~~

providing the dopant at a dosage of at least $10^{17}/cm^2$ in the at least one doped region.

wherein the dopant constituent of the solid glass layer on a front side of the semiconductor wafer is different from the dopant constituent of the solid glass layer on a back side of the semiconductor wafer and the solid glass layer is applied using a chemical vapor deposition at atmospheric pressure using a tetra-ethyl-ortho-silicate gas.

37. (Canceled)

38. (Canceled)

39. (Currently Amended) The method of claim ~~38~~ 36, wherein the neutral glass layer has a thickness of about 0.5 micrometers.

40. (Previously Presented) The method of claim 36, wherein the high temperature is between 1200 and 1280 degrees centigrade.